

CLAIMS

1. A gram-positive microorganism having a mutation or deletion of part or all of the gene encoding CP1 said mutation or deletion resulting in the inactivation of the CP1 proteolytic activity.
2. A gram-positive microorganism having a mutation or deletion of part or all of the gene encoding CP2 said mutation or deletion resulting in the inactivation of the CP2 proteolytic activity.
3. A gram-positive microorganism having a mutation or deletion of part or all of the gene encoding CP3 said mutation or deletion resulting in the inactivation of the CP3 proteolytic activity.
4. The gram-positive microorganism according to Claims 1, 2 or 3 that is a member of the family *Bacillus*.
5. The microorganism according to Claim 4 wherein the member is selected from the group consisting of *B. subtilis*, *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.
6. The microorganism of Claim 1, 2 or 3 wherein said microorganism is capable of expressing a heterologous protein.
7. The microorganism of Claim 6 wherein said heterologous protein is selected from the group consisting of hormone, enzyme, growth factor and cytokine.
8. The microorganism of Claim 7 wherein said heterologous protein is an enzyme.
9. The microorganism of Claim 8 wherein said enzyme is selected from the group consisting of a proteases, carbohydrases, and lipases; isomerases such as racemases, epimerases, tautomerases, or mutases; transferases, kinases and phosphatases.
10. A cleaning composition comprising at least one cysteine protease selected from the group consisting of CP1, CP2 and CP3.

11. An expression vector comprising nucleic acid encoding a cysteine protease selected from the group consisting of CP1, CP2 and CP3.

12. A host cell comprising an expression vector according to Claim 11.

13. A method for the production of a heterologous protein in a *Bacillus* host cell comprising the steps of

(a) obtaining a *Bacillus* host cell comprising nucleic acid encoding said heterologous protein wherein said host cell contains a mutation or deletion in at least one of the genes encoding cysteine protease 1, cysteine protease 2 and cysteine protease 3; and

(b) growing said *Bacillus* host cell under conditions suitable for the expression of said heterologous protein.

14. The method of Claim 13 wherein said *Bacillus* cell is selected from the group consisting of *Bacillus subtilis*, *B. licheniformis*, *B. lentus*, *B. brevis*, *B. stearothermophilus*, *B. alkalophilus*, *B. amyloliquefaciens*, *B. coagulans*, *B. circulans*, *B. lautus* and *Bacillus thuringiensis*.

15. The method of Claim 13 wherein said *Bacillus* host cell further comprises a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.

16. A gram-positive microorganism having a mutation or deletion in at least one of the genes encoding a cysteine protease selected from the group consisting of CP1, CP2 and CP3.

17. The microorganism of Claim 16 further comprising a mutation or deletion in at least one of the genes encoding apr, npr, epr, wpr and mrp.